## II. REMARKS

Upon entry of the amendment, claims 3, 5 and 15 to 18 will be pending. A marked up version showing the amendments to the claims is attached as Exhibit A and the claims as they will stand after entry is attached as Exhibit B. Claims 1, 2, 4, and 6-14 have been canceled without prejudice.

### A. Regarding the Amendments

Claims 1, 2, 4 and 6 to 14 are canceled herein without disclaimer and without prejudice to Applicants' pursuing prosecution of subject matter encompassed within one or more of the claims in an application claiming the benefit of priority of the subject application.

It is submitted that the amendments do not add new matter but, merely addresses formal matters. In addition, the amendments do not require a new search or new consideration because the subject matter of the amended claims is the same as the subject matter that has been under consideration. It is submitted that the amendments place the claims in condition for allowance, or in better condition for appeal by reducing the issues under consideration. Accordingly, it is respectfully requested that the amendments be entered.

### B. Objections and Rejections under 35 U.S.C. § 112

The Examiner objected to claims 2-4 under 37 C.F.R. §1.75(c) as being of improper dependent form for failing to further limit the subject matter of the previous claim. Claims 2 and 4 have been canceled without prejudice and claim 3 has been amended to depend from claim 15. Accordingly, Applicants submit that, the objection to claims 2-4 under 37 C.F.R. §1.75(c) is moot and respectfully request withdrawl of the rejection.

The Examiner rejected claims 2 and 18 under 35 U.S.C. § 112, second paragraph. Claim 2 has been canceled thus rendering the rejection moot. With respect to claim 18, the Examiner stated "claim 18 is indefinite because polynucleotides cannot be cultured." (Office Action, page 3, line 7.)

Claim 18 has been amended to depend from claim 17 and contains the step "culturing a host cell" instead of "culturing the polynucleotide." Applicants believe that amended claim 18 is clear and definite. Therefore, Applicants respectfully request withdrawal of the rejection of claims 2 and 18 under 35 U.S.C. § 112, 2nd paragraph.

**C. Rejection of Claims 3, 5, and 15-18 under 35 U.S.C. §102(b)**

The Examiner maintained the rejection of claims 3 and 5, and newly rejected claims 15-18, under 35 U.S.C. §102(b) as being anticipated by Brigstock et al., U.S. Patent No. 5,876,730. The Examiner stated the rejection is "for reasons cited in the previous Office Action, mailed 10/23/01, at page(s) 4," and that "HBGF as disclosed by Brigstock is residues 247 or 248 to the terminus of SEQ ID NO:2 of this application, which is a fragment of (b) of claim 15, as recited in part (d) of that claim."(Office Action, page 3, lines 21-22 and 25-26.)

Claim 15 as amended above recites "an amino acid sequence selected from the group consisting of SEQ ID NO:4, residue 75 through 172 of SEQ ID NO:4; and residue 4 through 172 of SEQ ID NO:4," and does not relate to "HBGF as disclosed by Brigstock." Thus, Brigstock et al. does not anticipate amended claim 15 or claims 5 and 16-18 which depend directly or indirectly therefrom. As claims 5 and 15-18 are not anticipated by Brigstock et al. and claim 3 is canceled, Applicants respectfully request withdrawal of the rejection of these claims under 35 U.S.C. §102(b) as being anticipated by this reference.

The Examiner maintained the rejection of claims 1 and 5, and newly rejected claims 15-18, under 35 U.S.C. §102(b) as being anticipated by Grotendorst et al., U.S. Patent No. 5,408,040. The Examiner stated that Applicants' argument, as presented in the amendment filed on 23 April 2002, that the present invention is directed toward a unique group of fragments not delineated by Grotendorst et al. was not persuasive because there are no functional or structural limitations to delineate the claimed invention from the fragments of Grotendorst, all of which would "not consist of SEQ ID NO:2" of this application, and a majority of which would comprise at least a fragment of residues 4-74 or 75-172 of SEQ ID NO:4, as Grotendorst envisions functional fragments, which

would inherently comprise at least exon 5, which is the portion of the molecule (as identified by Brigstock) with mitogenic acitivity. (Office Action, page 4, lines 6-11.)

Applicants maintain their position as stated in the previous amendment. The CTGF fragments are a unique subset not delineated by Grotendorst et al. that stimulate mitogenic activity. However, in order to expedite prosecution of the allowable subject matter, Applicants have canceled claim 1 above without prejudice to its renewal, and amended claim 15 above to recite specific fragments having structural limitations not identified by Grotendorst et al. Therefore, Grotendorst et al. does not anticipate amended claim 15 or claims 5 and 16-18 which depend directly or indirectly therefrom. Applicants thus respectfully request withdrawal of the rejection of claims 1, 5 and 15-18 under 35 U.S.C. §102(b) as being anticipated by Grotendorst et al.

The Examiner maintained the rejection of claims 2-4 under 35 U.S.C. §103(a) as being unpatentable over Grotendorst et al., U.S. Patent No. 5,408,040, in view of Brigstock et al., U.S. Patent No. 5,876,730. Specifically, the Examiner stated the claims are not found "to be directed to any specific fragments, as all three claims either state 'of a fragment thereof' or 'comprising'." (Office Action, page 4, line 32, to page 5, line 1.)

Claims 2 and 4 have been canceled above without prejudice to their renewal, and this rejection is therefore moot with respect to these claims. Applicants have amended claim 3 to remove the "fragment" language in order to expedite prosecution. Accordingly, Applicants respectfully request withdrawal of the rejection of claims 2-4 under 35 U.S.C. §103(a).

In view of the amendments and the above remarks, it is submitted that the claims are in condition for allowance, and a notice to that effect is respectfully requested. Although no fee other than that submitted herewith is deemed necessary in connection with the filing of this Response, if any additional fee is required, the Commissioner is authorized to charge any fee (or credit any overpayment) to Deposit Acct. No. 50-1355.

The Examiner is invited to contact Applicants' undersigned representative if there are any questions relating to this application.

Respectfully submitted,

Dated: 12/11/02

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Enclosures: Exhibit A and Exhibit B

In re Application of: Grotendorst and Neff
Application No.: 09/461,646
Filed: December 14, 1999

PATENT
Attorney Docket No.: FIBRO1130-2

**EXHIBIT A**

**VERSION OF CLAIMS WITH MARKINGS TO SHOW CHANGES**

Please reinstate claim 3.

Please amend claims 3, 15 and 18 as follows:

3. (Twice Amended) The polypeptide of claim [1] 15, consisting of the amino acid sequence from residue 75 through 172 of SEQ ID NO:4 [or a fragment thereof].

15. (Amended) An isolated polypeptide selected from the group consisting of:

(a) an amino acid sequence comprising SEQ ID NO:4;

(b) an amino acid sequence [comprising] consisting essentially of residue 4 through 74 of SEQ ID NO:4;

[(c) an amino acid sequence consisting of residue 75 through 172 of SEQ ID NO:4;]

[(d)](c) a fragment of (b) [or (c)];

[(e)] (d) an amino acid sequence [comprising] consisting essentially of residue 4 through 74 of SEQ ID NO:4 [and a portion of residue 75 through 172 of SEQ ID NO:4]; and

[(f)] (e) an amino acid sequence [comprising residue] consisting essentially of 4 through 172 of SEQ ID NO:4; wherein the polypeptide has mitogenic activity and does not consist of SEQ ID NO:2.

18. (Amended) A method of producing a polypeptide having mitogenic activity, the method comprising:

(a) culturing [the] a [polynucleotide] host cell of claim [5] 17 under conditions suitable for formation of the polypeptide; and

(b) recovering the polypeptide.

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**EXHIBIT B**

**CLAIMS UPON ENTRY OF THE AMENDMENT**

3. (Twice Amended) The polypeptide of claim 15, consisting of the amino acid sequence from residue 75 through 172 of SEQ ID NO:4.

5. (Amended) An isolated polynucleotide encoding the polypeptide of claim 15 or a complement thereof.

15. (Amended) An isolated polypeptide selected from the group consisting of:

(a) an amino acid sequence comprising SEQ ID NO:4;

(b) an amino acid sequence consisting essentially of residue 4 through 74 of SEQ ID NO:4;

(c) a fragment of (b);

(d) an amino acid sequence consisting essentially of residue 4 through 74 of SEQ ID NO:4 and

(e) an amino acid sequence consisting essentially of 4 through 172 of SEQ ID NO:4; wherein the polypeptide has mitogenic activity and does not consist of SEQ ID NO:2.

16. An expression vector comprising the polynucleotide of claim 5.

17. A host cell comprising the polynucleotide of claim 5.

18. (Amended) A method of producing a polypeptide having mitogenic activity, the method comprising:

(a) culturing a host cell of claim 17 under conditions suitable for formation of the polypeptide; and

(b) recovering the polypeptide.